

# UK Patent Application

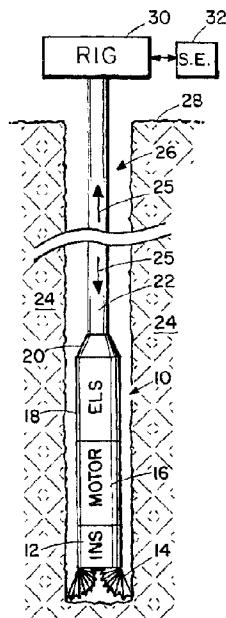
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(71) Applicant(s): Weatherford Canada Partnership (Incorporated in Canada) 4200 150-6th Avenue S.W, Calgary, Alberta T2P 3Y7, Canada, Canada	(56) Documents Cited by ISA: WO 2004/046505 A2 US 6725061 A US 6392561 B1 US 3090031 A	(58) Field of Search by ISA: INT CL E21B Other: MicroPatent, IP.com, DialogPro	
(72) Inventor(s): Christopher Walter Konschuh Michael Louis Larronde Larry Wayne Thompson Macmillan M Wisler			
(74) Agent and/or Address for Service: D.W. & S.W. Gee 1 South Lynn Gardens, London Road, SHIPSTON ON STOUR, Warwickshire, CV36 4ER, United Kingdom			

(54) Abstract Title: **Method and apparatus for transmitting sensor response data and power through a mud motor**

(57) Apparatus and methods for establishing electrical communication between an instrument subsection disposed below a mud motor and an electronics sonde disposed above the mud motor in a drill string conveyed borehole logging system. Electrical communication is established via at least one conductor disposed within the mud motor and connecting the instrument subsection to a link disposed between the mud motor and the electronics sonde. The link can be embodied as a current coupling link, a magnetic coupling link, an electromagnetic telemetry link and a direct electrical contact link. Two way data transfer is established in all link embodiments. Power transfer is also established in all but the electromagnetic telemetry link.



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